

NAKAMOTO et al., 10/689,594
25 July 2005 Amendment
Responsive to 23 March 2005 Office Action

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REMARKS

This paper is responsive to any paper(s) indicated above, and is responsive in any other manner indicated below.

PENDING CLAIMS

Claims 5-12 were pending, under consideration and subjected to examination in the Office Action. Appropriate claims have been amended, canceled and/or added (without prejudice or disclaimer) in order to adjust a clarity and/or focus of Applicant's claimed invention. That is, such changes are unrelated to any prior art or scope adjustment and are simply refocused claims in which Applicant is present interested. At entry of this paper, Claims 13-39 will be pending for further consideration and examination in the application.

ALL REJECTIONS UNDER 35 USC '102 AND '103 - TRAVERSED

The 35 USC '102 rejection and the 35 USC '103 rejection of ones of claims 5-12 are respectfully traversed. However, such rejections have been rendered obsolete by the present clarifying amendments to Applicant's claims, and accordingly, traversal arguments are not appropriate at this time. However, Applicant respectfully submits the following to preclude renewal of any such rejections against Applicant's clarified claims.

All descriptions of Applicant's disclosed and claimed invention, and all descriptions and rebuttal arguments regarding the applied prior art, as previously submitted by Applicant in any form, are repeated and incorporated hereat by

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reference. Further, all Office Action statements regarding the prior art rejections are respectfully traversed. As additional arguments, Applicant respectfully submits the following.

In order to properly support a '102 anticipatory-type rejection, any applied art reference must disclose each and every limitation of any rejected claim. The applied art does not adequately support a '102 anticipatory-type rejection because, at minimum, such applied art does not disclose (or suggest) the following discussed limitations of Applicant's claims.

Applicant's disclosed and claimed invention is directed toward sample processing arrangements (e.g., apparatus, system, methods) which allow a technician (e.g., user) to more quickly and accurately diagnose/fix an abnormality which might occur during a sample processing operation. More particularly, Applicant's realized that sample processing involves a time sequence of many steps, and that any give abnormality might have been the product/result of something from a past step. For example, an excessive concentration of etching material might be applied to a sample, and then a resultant abnormality might not show up until many steps later.

Accordingly, Applicant realized that it would be useful (e.g., for abnormality diagnosis) for an arrangement to record time sequence data corresponding to multiple differing operations occurring during the processing operation, and to make such time sequence information selectable for display by a user. Accordingly, when an abnormality occurs, a technician can display historical time sequence data synchronously with the abnormality data, which may help diagnosis as to the cause of the abnormality.

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In terms of distinguishing claim limitations, independent claim 13, for example, recites" a recording device which records information of an operation in the main unit as predetermined data, the recording device records information including a plurality of time sequence data corresponding to signals concerned with operations of a plural portions of the main unit which are output during the operation of the main unit; and a display unit which displays at least one information selected by an user from among the information recorded as the predetermined data in the recording device and an information about an abnormality occurred during the operation of the main unit, wherein both the information selected by the user and the information about the abnormality is displayed on the display unit synchronously."

The other ones of Applicant's claims contain similar or analogous features/limitations. Added "system" claims 22-30 and "method" claims 31-39 substantially parallel "apparatus" claims 13-21.

Turning now to rebuttal/preclusion of the Hirabayashi et al. reference, at best, such reference appears (see FIG. 13) only to display a present "ion concentration" together with some "label numbers". That is, Hirabayashi et al. appears NOT to disclose or suggest the recording/displaying of time sequence data.

In addition to the foregoing, the following additional remarks from Applicant's foreign representative are also submitted in support of traversal of the rejection and patentability of Applicant's claims.

The invention of which prosecution is carried out in the RCE resides in: A sample processing apparatus comprising: "a display unit ...wherein both the information selected by the user and the information about the abnormality is

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displayed on the display unit synchronously". That is, the display unit displays information recorded by "a recording device which records information of an operation in the main unit as predetermined data, the recording device records information including a plurality of time sequence data corresponding to signals concerned with operations of a plural portions of the main unit which are output during the operation of the main unit", and also displays "information about the abnormality". Support for the amendment will be found in paragraphs 0062-0066, and 0053—0054 in US publication 2004/0078946A1.

By this structure of this invention, when an abnormality occurs in a sample processing apparatus in which a sample is processed in a processing chamber, the information concerned with the abnormality may be displayed together with information recording operation of plural portions of the apparatus, in a synchronized manner. Such allows comparison of the abnormality verses operation of each portion of the apparatus, i.e., via display, such that a user can judge the cause of the abnormality in a short time and accurately.

Especially, by including functions for the user to select operational information of the apparatus to be displayed, in an apparatus of which operations of plurality of portions structuring the apparatus easily affects the abnormality, the user can recognize mutual effects of operation of the apparatus, or, the user can sort out elements of operation of each portions which might be having negative serious affects, so as to judges the cause of the abnormality precisely in a short time.

Hirabayashi discloses an apparatus for processing a sample including a recording apparatus for recording data during processing, and a display apparatus for displaying abnormality information. However, Hirabayashi discloses only to

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display, as shown in Figure 13, label numbers of processing of each sample and measured results. However, Hirabayashi's information is limited, and in effect displays information of abnormality when the results cannot be obtained. That is Hirabayashi does not disclose the requisite of this invention.

More particularly, an arrangement enabling a user to select at least one of information of "said information of operation of plurality of portions of the main unit outputted during said operation recorded as a plurality of time sequence data" to be "displayed with information of abnormality synchronizedly" as the selected information.

Display portion 41 in Hirabayashi displays optional information concerned with biological DNA analysis, and analysis results and analysis conditions are displayed whether is the operation is good or bad. However, in the cited reference, displaying contents are only about analysis and not for operation of apparatus, especially Hirabayashi does not disclose or even hint at displaying information of operation of each portion of the apparatus while processing the sample with an abnormality in a synchronized manner.

As mentioned in above, cited references are different from this invention in its operation and effects. Therefore, this invention includes sufficient inventive steps, and the unique arrangement of this invention will be difficult to be thought of from Hirabayashi, even by the artisan in the art.

As a result of all of the foregoing, it is respectfully submitted that the applied art would not support a '102 anticipatory-type rejection or '103 obviousness-type rejection of Applicant's claims. Accordingly, reconsideration and withdrawal of such

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'102 and '103 rejections, and express written allowance of all of the rejected claims, are respectfully requested.

EXAMINER INVITED TO TELEPHONE

The Examiner is herein invited to telephone the undersigned attorneys at the local Washington, D.C. area telephone number of 703/312-6600 for discussing any Examiner's Amendments or other suggested actions for accelerating prosecution and moving the present application to allowance.

RESERVATION OF RIGHTS

It is respectfully submitted that any and all claim amendments and/or cancellations submitted within this paper and throughout prosecution of the present application are without prejudice or disclaimer. That is, any above statements, or any present amendment or cancellation of claims (all made without prejudice or disclaimer), should not be taken as an indication or admission that any objection/rejection was valid, or as a disclaimer of any scope or subject matter. Applicant respectfully reserves all rights to file subsequent related application(s) (including reissue applications) directed to any/all previously claimed limitations/features which have been subsequently amended or cancelled, or to any/all limitations/features not yet claimed, i.e., Applicant continues (indefinitely) to maintain no intention or desire to dedicate or surrender any limitations/features of subject matter of the present application to the public.

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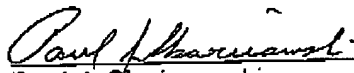
CONCLUSION

In view of the foregoing amendments and remarks, Applicant respectfully submits that the claims listed above as presently being under consideration in the application are now in condition for allowance. Accordingly, early allowance of such claims is respectfully requested.

To the extent necessary, applicants petition for an extension of time under 37 CFR 1.136. Please charge any shortage in the fees due in connection with the filing of this paper, including extension of time fees, to the deposit account of Antonelli, Terry, Stout & Kraus, LLP, Deposit Account No. 01-2135 (Case: 500.41300CX1), and please credit any excess fees to such deposit account.

Respectfully submitted,

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